2002

Virginia Department of Transportation Daily Traffic Volume Estimates Including Vehicle Classification Estimates

where available

Special Locality Report 154

Town of Christiansburg

Prepared By

Virginia Department of Transportation Mobility Management Division

In Cooperation With

U.S. Department of Transportation Federal Highway Administration

Virginia Department of Transportation Mobility Management Division Traffic Monitoring Section

The Virginia Department of Transportation (VDOT) conducts a program where traffic count data are gathered from sensors in or along streets and highways and other sources. From these data, estimates of the average number of vehicles that traveled each segment of road are calculated. VDOT periodically publishes booklets listing these estimates.

One of these booklets, titled "Average Daily Traffic Volumes with Vehicle Classification Data, on Interstate, Arterial and Primary Routes" includes a list of each Interstate and Primary highway segment with the estimated Annual Average Daily Traffic (AADT) for that segment. AADT is the total annual traffic estimate divided by the number of days in the year. This booklet also includes information such as estimates of the percentage of the AADT made up by 6 different vehicle types, ranging from cars to double trailer trucks; estimated Annual Average Weekday Traffic (AAWDT), which is the number of vehicles estimated to have traveled the segment of highway during a 24 hour weekday averaged over the year; as well as Peak Hour and Peak Direction factors used by planners to formulate design criteria.

In addition to the Primary and Interstate publication, one hundred books are published periodically, one for each of 100 areas across the state defined by VDOT for record-keeping purposes. These books include traffic volume estimates for roads within the county, cities, and towns within the area. These books are titled "Daily Traffic Volumes Including Vehicle Classification Estimates, where available; Jurisdiction Report numbers 00 through 99".

Also available are a number of reports summarizing the average Vehicle Miles Traveled (VMT) in selected jurisdictions and other categories of highways. There are many different ways to present traffic volume summary information. Because the user determines the value of each presentation, the reports have been redesigned based on user requests and feedback. The people at VDOT Mobility Management's Traffic Monitoring Section who produce these books welcome requests for other helpful ways of presenting the summary information.

A compact disc (CD) is available that includes files in the Adobe® Portable Document Format (PDF) that can be displayed, searched, and printed using common desktop computer equipment. The CD includes the publications described above as well as a number of other reports, including specialized VMT summaries and smaller AADT reports for each city and town separately.

Publication Notes

Parallel Roads

For road inventory and management purposes, some roadways are counted separately by direction and have separately published traffic estimates for each direction of travel. Examples of such roadways are the interstate system and routes with separated facilities and (usually) one-way traffic facilities in urban areas. In these publications, they are referred to as parallel roads. As a convenience for the users of the publication, the listing for segments of roads with parallel segments are published with both the traffic estimates for their own direction of travel (e.g. I-95 Northbound) as well as the estimate of the total of all traffic on the same route including parallel roadways (all directions of I-95). The publication will have a "Combined Traffic Estimates for Parallel Roadways on this Route" or "Combined Traffic" identifiers for the combined direction of travel estimates.

Roadways such as I-395 with a North segment, a South segment and a separate Reversible lane segment will have the estimate for more than two parallel roadways included in the entire combined traffic estimate.

Some routes have very complicated paths through cities and towns. These parallel paths may be too complex to allow a relationship between nearby sections of the opposite direction on the same route. In this case, to indicate that the traffic estimates for such a road segment may not include all directions of traffic on that route, the line that would list the combined values will indicate "NA" for not available.

VDOT's traffic monitoring program includes more than 100,000 segments of roads and highways ranging from several mile sections of Interstate highways to very short sections of city streets. Due to problems experienced obtaining some traffic count data, and the level of quality necessary to maintain confidence in the data, no estimate is currently available for some segments of roadway. These segments are included in the publications indicating "NA" for not available. It is the intention of the VDOT's Mobility Management Traffic Monitoring group to obtain the data necessary and to report traffic volume estimates on all road segments included in these publications.

Many of the road segments in this program are local secondary roads. The amount and detail of data collected on these roads are not as great as the data collected on higher volume roads. The vehicle classification, average weekday traffic volumes, and the theoretical design hour traffic volumes are not calculated for these roads. The publications indicate "NA" for the information that is not available.

This publication is based on a traffic monitoring program initiated in 1997. Because the data collection techniques and statistical evaluation processes are different than those used in previous years, comparison with previous publications may be misleading.

Glossary of Terms:

Route: The Route Number assigned to this segment of roadway with the master inventory route number if this is an overlapping route, with official street or highway name if available.

Length: Length of the traffic segment in miles.

AADT: Annual Average Daily Traffic. The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

QA: Quality of AADT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- H Historical Estimate
- M Manual Uncounted Estimate
- N AADT of Similar Neighboring Traffic Link
- O Provided By External Source
- R Raw Traffic Count, Unfactored

4Tire: Percentage of the traffic volume made up of motorcycles, passenger cars, vans and pickup trucks.

Bus: Percentage of the traffic volume made up of busses.

2Axle Truck: Percentage of the traffic volume made up of 2 axle single unit trucks (not including pickups and vans).

3+Axle Truck: Percentage of the traffic volume made up of single unit trucks with three or more axles

1Trail Truck: Percentage of the traffic volume made up of units with a single trailer.

2Trail Truck: Percentage of the traffic volume made up of units with more than one trailer.

QC: Quality of Classification Data:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- C Short Term Classified Traffic Count Data
- F Factored Short Term Traffic Count Data
- H Historical Estimate
- M Mass Collective Average
- N Classification Estimates of Similar Neighboring Traffic Link

Peak Hour: The estimate of the traffic volume for the 30th highest traffic volume occurring in a one-year period divided by the AADT for the same one-year period.

QK: Quality of the Peak Hour estimate:

- A Factor based on 30th Highest Hour Observed During 12 Months of Continuous Traffic Data
- B Factor based on 30th Highest Hour Observed During Less than 12 Months of Continuous Traffic Data
- Factor based on Highest Hour Collected at in a 48 Hour Weekday Period
- M Factor based on Manual Estimate of 30th Highest Hour
- N Peak Hour Factor of Similar Neighboring Traffic Link
- O Provided by External Source

Dir Factor: The estimate of the portion of the traffic volume traveling in the peak direction during the Peak Hour..

AAWDT: Average Annual Weekday Traffic. The estimate of typical traffic over the period of one year for the days between Monday through Thursday inclusive.

QW: Quality of AAWDT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- M Manual Uncounted Estimate
- N AAWDT of Similar Neighboring Traffic Link
- O Provided by External Source

Year: Year for which the published values are appropriate. If the Quality of AADT (QA) is "R", the year is the year that the raw traffic count was collected, and if available,

Route Shield Legend

Route Systems

North
81 Interstate Route Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.

(29) US Route

7 Virginia State Route

(600) Secondary Route

Special Routes

Bus Bus - Business Route
Bypas - Bypass Route
Truck - Truck Route
ALT ALT - Alternate Route
Wve - Wve Route connector

P - Parallel Route; Southbound or Westbound direction lanes of a numbered route where they are on a different road facility than the other direction.

The VDOT Maintainenance Jurisdiction number is displayed below the Secondary Route Number if the Maintenance Jurisdiction is different than the jurisdiction in the title of the report.

Virginia Department of Transportation Mobility Management Division 2002 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Christiansburg

						Town of C	hristian	sburg								
Route	Length	AADT	QA	4Tire	Bus	2Axle	Tru 3+Axle		2Trail	QC	Peak Hour	QK	Dir Factor	AAWDT	QW	Year
Town of Christiansh	ourg			From:	~	OI OI : :	1 37	T 01								
8	0.22	14000	G	95%	0%	CL Christia 3%	1%	1%	0%	F	0.094	F	0.591	15000	G	2002
N/ Main C4	0.77	42000		From:	00/	Old SCL			-00/		0.000		0.500	44000		2002
8 W Main St	0.77	13000	G	95% To:	0%	3%	1% dford St	1%	0%	С	0.092	F	0.592	14000	G	2002
				From:												
11 Radford St	1.40	11000	G	97%	0%	2%	hristiansbu 0%	1%	0%	С	0.096	F	0.507	11000	G	2002
11 Radford St	1.10		•	To:	070		W Main S			Ū	0.000	•	0.007	11000	Ü	2002
~~				From:			Radford S									
11 W Main St	0.30	9600	G	97%	0%	2%	0%	1%	0%	F	0.089	F	0.56	10000	G	2002
~				To: From:		Bus US 46	0 S Frank	lin St	-							
(11) E Main St	0.12	8300	G	97 <u>%</u>	0%	2%	0%	1%	0%	F	0.087	F	0.514	8600	G	2002
<u> </u>				To: From:			noke St									
11 Roanoke St	0.11	13000	G	97%	0%	2%	Main St 0%	1%	0%	F	0.087	F	0.529	13000	G	2002
TT Roundie of	0.11	10000	Ū	T	070			170		•	0.007	•	0.020	10000	Ü	2002
Poonoko St	0.00	12000	G	From: 97%	0%	2%	raig St 0%	1%	0%	F	0.091	F	0.535	12000	G	2002
(11) Roanoke St	0.98	12000	G	9170	076	270	076	1 70	070	F	0.091	Г	0.555	13000	G	2002
	0.00	45000		From:	00/		1 Depot S		-00/		0.004		0.540	40000		0000
(11) Roanoke St	0.90	15000	G	95%	0%	2%	1%	1%	0%	С	0.064	F	0.549	16000	G	2002
~~				From:			S 460									
(11) Roanoke St	0.91	17000	G	93%	0%	2%	1%	3%	0%	F	0.083	F	0.567	18000	G	2002
~				To: From:		20 Mile No	rth I-81 at	Ramp								
11 Roanoke St	0.29	8500	N	93%	0%	2%	1%	3%	0%	Ν	0.091	Ν	0.507	8800	N	2002
\smile				To: From:		Tower Ro	l, Hamptor	ı Rd								
11 Roanoke St	2.01	8500	G	93%	0%	2%	1%	3%	0%	F	0.091	F	0.507	8800	G	2002
\bigcirc				To-		ECL C	nristiansbu	rg								
North				From:		SCL Cl	ristiansbu	rg								
(81)	3.90	21000	G	68%	1%	2%	1%	27%	2%	F	0.067	F		21000	G	2002
	Combined Traffic:	43000	G	69%	1%	2%	1%	26%	2%	F	0.068	F	0.525	42000	G	
North				From:		US 1	1 US 460									
North 81	0.77	24000	G	68%	1%	2%	1%	27%	2%	F	0.064	F		24000	G	2002
01)	Combined Traffic:	47000	G	69%	1%	2%	1%	26%	2%	F	0.062	F	0.509	46000	G	
				To:			nristiansbu									
South				From:		SCL Cl	ristiansbu	rg								
(81)	4.32	22000	G	70%	1%	2%	1%	25%	2%	F	0.067	F		21000	G	2002
	Combined Traffic:	43000	G	69%	1%	2%	1%	26%	2%	F	NA			42000	G	
0 "				To: From:		US 1	1 US 460									
South 81	0.29	23000	G	70%	1%	2%	1%	25%	2%	_	0.061	F		22000	G	2002
81)	Combined Traffic:	47000	G	70% 69%	1%	2% 2%	1%	25% 26%	2% 2%	F F	0.061	F F	0.509	46000	G G	2002
	Combined Trainc.	47000	G	To:	1 /0		nristiansbu		2 /0	•	0.002	'	0.509	40000	G	
				From:			S 460	-	ì							
(111) Cambria Stre	et 0.79	5800	G	95%	0%	3%	1%	1%	0%	С	0.09	F	0.540	6000	G	2002
111) Samusia Sas	S. S. S.		_	To:				.,,			0.00	•	0.0.0	0000	Ū	
(111) Cambria Stre	et 0.39	6700	G	96%	1%	3%	lett Rd 0%	1%	0%	С	0.095	F	0.513	7000	G	2002
TTT Sambila Sile	J. 0.03	5,00	3	70 70	1 /0		epot St	1 /0	3 /0	J	0.000	'	0.010	7000	J	2002
				From:		Caı	nbria St									
111 Depot Street	0.97	4300	G	96%	0%	2%	1%	1%	0%	F	0.093	F	0.501	4500	G	2002
\sim				To: From:		P	ark St									
(111) Depot Street	0.11	5900	G	96%	0%	2%	1%	1%	0%	С	0.096	F	0.518	6100	G	2002
				To:			JS 11									
				From:		WCL C	hristiansbu	ırg								
114 Peppers Ferr	y Road 1.44	13000	G	96%	0%	2%	1%	1%	0%	F	0.084	F	0.514	14000	G	2002
\smile				To:		U	S 460									
	•			_						_	_	_				

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						TOWIT OF C	illiStiai	isburg								
Route	Length	AADT	QA	4Tire	Bus			uck 1Trail		- QC	Peak Hour	QK	Dir Factor	AAWDT	QW	Year
Town of Christiansburg				From:		3.101.01			i							
(460 N Franklin St	0.97	40000	N	89%	0%	2%	nristiansb 1%	urg 7%	1%	N	0.08	N	0.583	41000	N	2002
400)	0.0.										0.00		0.000		.,	
N Franklin St	0.66	49000	G	From: 89%	0%	SR 114 Pe 2%	1%	7%	1%	F	0.082	F	0.55	50000	G	2002
400				To:			460 Bus									
~~~~				From:	201		BUS US		20/	_		_		10000		
460 11 Roanoke St	0.91	17000	G	93%	0%	2%	1%	3%	0%	F	0.083	F	0.567	18000	G	2002
~~~~ B + 01	2.22	0.500		From:		0.20 Mile No			20/		0.004		0.507	2000		0000
460 (11) Roanoke St	0.29	8500	N	93%	0%	2%	1%	3%	0%	N	0.091	N	0.507	8800	N	2002
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				From:	201	Tower Rd									_	
460 (11) Roanoke St	2.01	8500	G	93% To:	0%	2%	1%	3%	0%	F	0.091	F	0.507	8800	G	2002
				From:			nristiansb	urg								
Bus	0.18	32000	G	96%	0%	2%	S 460 1%	1%	0%	F	0.089	F	0.592	33000	G	2002
460	0.10	32000	G	30 /0	0 70				0 70		0.003	•	0.552	33000	U	2002
Bus				From:		WCL C	hristiansb	ourg								
460 N Franklin St	0.11	32000	G	96%	0%	2%	1%	1%	0%	F	0.089	F	0.592	33000	G	2002
Pug				To: From:		SR 111	Cambria	St								
Bus 460 N Franklin St	1.38	27000	G	96%	0%	2%	1%	1%	0%	С	0.082	F	0.534	28000	G	2002
460	1.50	27000	Ü	70 70	0 70			170	070	O	0.002	•	0.554	20000	J	2002
Bus				From:		De	epot St									
460 N Franklin St	0.28	12000	G	96%	0%	2%	1%	1%	0%	F	0.083	F	0.518	12000	G	2002
Due.				To: From:		US 1	1 Main S	t	-							
Bus 460 \ 11 \ E Main St	0.12	8300	G	97%	0%	2%	0%	1%	0%	F	0.087	F	0.514	8600	G	2002
400 (11) 2 Main 60	0.12	0000		To:	0,0		anoke St	170	7,0	•	0.001	•	0.011	0000	Ū	2002
Bus				From:		ΕN	Main St									
460 (11) Roanoke St	0.11	13000	G	97%	0%	2%	0%	1%	0%	F	0.087	F	0.529	13000	G	2002
Pue				To- From:		C	raig St									
Bus 460 (11) Roanoke St	0.98	12000	G	97%	0%	2%	0%	1%	0%	F	0.091	F	0.535	13000	G	2002
400 (11)				To:												
Bus		45000		From:			1 Depot S					_		40000		
460 (11) Roanoke St	0.90	15000	G	95%	0%	2%	1%	1%	0%	С	0.064	F	0.549	16000	G	2002
							S 460									
1 Falling Branch Rd	0.46	NA		From:	60-	640 JB-154	SCL Chr	istiansburg	5		NA			NA		
1 Falling Branch Rd	0.40	INA		To:		US 11	Roanoke	St			INA			INA		
				From:	60.4				,							
(3500)	0.14	NA		From: 60-666 JB-154 WCL Christiansburg						NA			NA			
(3300)	• • • • • • • • • • • • • • • • • • • •			To:		SR 8 W	Main Str	eet								
				From:			nristiansb							· ·		
(3501) S Franklin St	1.21	4500	G	97%	0%	2%	1%	1%	0%	С	0.103	F	0.735	4700	G	2002
				To:		Alle	ghany St									
O Franklin 01	^	0000	_	From:	001		eghany St		001	_	0.400	_	0.00	0000	_	0000
(3501) S Franklin St	0.57	6000	G	97% To:	0%	2%	1%	1%	0%	F	0.102	F	0.69	6300	G	2002
							0 Main S									
(3502) Phlegar St	0.08	6100	G	96%	0%	3%	1 Main S 0%	1%	0%	Г 0.00	F	0 522	6400	G	2002	
(3502) Phlegar St	0.00	0100	G	90% To:	U 70		irst St	1 70	U 70	F	0.09	Г	0.532	0400	G	2002
				From:			legar St									
(3502) First St	0.40	6100	G	96%	0%	3%	0%	1%	0%	С	0.096	F	0.518	6300	G	2002
$\overline{}$				To:	_	US 460	Roanoke	St								
				From:		SR 8	App. Loc	)								
(3503) Depot St	0.12	9300	G	97%	0%	2%	1%	1%	0%	F	0.091	F	0.663	9700	G	2002
				To: From:		Co	llege St									
(3503) Depot St	0.14	NA		. cont.							NA			NA		
				To:		J	JS 11									

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Length	AADT	QA	4Tire	Bus			2Trail	QC	Peak Hour	QK	Dir Factor	AAWDT	QW	Year
0.41	NA		From:		US 11				NIA			NΙΔ		
0.41	INA								INA			INA		
			From:		C7US 460									
0.91	NA								NA			NA		
0.07	4700	_		00/		40/	00/	_	0.400	_	0.574	4700	_	0000
0.87	1700	G		0%		1%	0%	C	0.103	F	0.571	1700	G	2002
0.17	2200	_		00/		10/	00/	_	0.110	_	0.700	2200	0	2002
0.17	2200	G		U%		170	0%	F 0.118	Г	0.762	2300	G	2002	
0.30	2600	G		10/		10/	0%	C	0 117	_	0.569	2800	G	2002
0.39	2600	G	70 /6	1 /0			0 /6	C 0.11	0.117	Г	0.506	2000	O	2002
			From:			**5	<u>.</u>							
	2400	G	1.0		Canaan Rd				0.006	E		2500	G	2002
	2400	G	To:		Miller St			0.000	•		2500	O	2002	
			From:											
	590	G			Plum St				0.078	F		610	G	2002
	000	Ū	To:		King St		1		0.070	•		010		2002
	2600	G	From:				1		0.096	F	0.606	2600	G	2002
2			<u> </u>		Regali Diive									
			To:		Wimmer Stree	:			0.000	•	0.000			
			From:				1							
	520	G	<u> </u>		Tisher St				0.095	F		550	G	2002
			To-		Simmons Rd									
			From:		Denot Street		Ī							
	260	G	<u> </u>		Берегвиеес				0.103	F	0.593	260	G	2002
			To:		E. Main Street									
			From:		Lester Street									
	600	G	<u> </u>		Desici Succi				0.111	F	0.602	600	G	2002
			То:		Park Street									
			From:											
	110	G	<u> </u>		-				0.099	F		120	G	2002
			То:		Dogwood Terrac	e								
			From:				Ī							
	700	G							0.102	F	0.588	700	G	2002
	780	G							0.102	г	0.000	780	G	2002
	0.41 0.91 0.87 0.17	0.41 NA 0.91 NA 0.87 1700 0.17 2200 0.39 2600 2400 590 2600 2600 600 110	0.41 NA 0.91 NA 0.87 1700 G 0.17 2200 G 0.39 2600 G 2400 G 2600 G 2600 G 2600 G 600 G 110 G	0.41 NA  0.91 NA  To From:  0.87 1700 G 96%  To From:  0.17 2200 G 96%  To From:  0.39 2600 G 96%  To From:  2400 G  To From:  590 G  To From:  2600 G  To From:  520 G  To From:  110 G  From:  From:	O.41   NA	Canaan Rd	Depot Street   Depo	Canaan Rd	Canana Rd	Content	Canan Rd	Company   Comp	Canage   C	Adv

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